

REMARKS

Applicants will address each of the Examiner's objections and rejections in the order in which they appear in the Office Action.

I. Objection

The Examiner objects to Claim 24 for an informality for the term "drainer regions." Applicants have amended Claim 24 herein to now recite "drain regions." Accordingly, it is requested that this objection now be withdrawn.

II. Claim Rejections – 35 USC §103

The Examiner also has a number of rejections under 35 USC §103. Applicants will address each in the order in which they appear in the Office Action.

A. Rejection Over Yamazaki et al.' 887

The Examiner continues to reject Claims 1-4, 6-9, 14-17 and 19-22 under 35 USC §103 as being unpatentable over Yamazaki et al. '887. This rejection is respectfully traversed.

More specifically, in the Office Action, the Examiner is contending that Yamazaki '887 discloses a first conductive layer (the inner sub-layer of each of the gate electrodes 107, 113) being in contact with a gate insulating film (106, 112) and a second conductive layer (the outer sub-layer of each of the gate electrodes 107, 113) being in contact with the gate insulating film and top and side surfaces of the first conductive layer. Applicants respectfully disagree with this interpretation of the reference as being improper and unsupported by the reference.

Initially, Applicants note that the alleged "outer" and "inner" sub-layers are not described or disclosed in Yamazaki '887 but appear to be a relative concept. Hence, no boundary between the alleged outer sub-layer and the alleged inner sub-layer can be identified in the reference. Further, the Examiner does not indicate where in the reference the alleged outer sub-layer and inner sub-layer in the gate electrode are located.

Hence, it is not possible to identify in Yamazaki '887 where the reference allegedly shows the portion which the second conductive layer is in contact with the gate insulating film in the p-channel TFT partially overlaps the second source and drain regions, as recited in the claimed invention. Applicants respectfully submit that this is not shown or suggested in the cited reference, and accordingly, the claimed invention is patentable over this reference. Therefore, it is requested that this rejection be withdrawn.

B. Rejection Over Miyasaka et al.

The Examiner also continues to reject Claims 11 and 12 under 35 USC §103 as being unpatentable over Miyasaka et al. This rejection is also respectfully traversed.

In particular, in this rejection, the Examiner is contending that Miyasaka discloses the second semiconductor layer comprising a second channel formation region and second source and drain regions (4, 10).

Applicants disagree with this interpretation of the reference. Region 10 in Fig. 26 in Miyasaka appears to be a LDD region (Lddp), not a source or drain region.

The Examiner agrees that Miyasaka is a LDD region but contends that it "... is also considered as a drain region." Applicants respectfully disagree.

Miyasaka states that “. . . an LDD-type TFT has a high-resistance portion [the LDD region} between a channel portion and source and drain portions . . . “ (see Col. 33, lns. 29-31 of Miyasaka). Further, Miyazaki teaches forming the source and drain regions (a thin n+ semiconductor film 3 and a thin p+ semiconductor film 4) and the LDD regions (a thin n- semiconductor film 9 and a thin p- semiconductor film 10) by implanting impurities, and that these regions have different impurity concentrations (see Col. 33, ln. 47-col. 34, ln. 23). Thus, Miyazaki distinguishes the source and drain regions and the LDD regions.

Hence, region 10 in Miyasaka is not a source or drain region, and as a result, the source and drain regions in Miyasaka are not in contact with the channel region, as required in the Claim 11, but are in contact with the LDD region.

Accordingly, Applicants respectfully submit that independent Claim 11 and those claims dependent thereon are not disclosed or suggested by the cited reference and are patentable thereover. Therefore, it is respectfully requested that this rejection be withdrawn.

C. Rejection Over Miyasaka et al. in view of Johnson

The Examiner also rejects Claims 24-26 under 35 USC §103 as being unpatentable over Miyasaka et al. in view of Johnson. This rejection is also respectfully traversed.

For at least the reasons discussed above for Claim 11, independent Claim 24 and those claims dependent thereon are not disclosed or suggested by the cited references and are patentable thereover.

Therefore, it is respectfully requested that this rejection be withdrawn

Accordingly, for at least the above-stated reasons, it is respectfully submitted that the claims are patentable, and the rejections under §103 should be withdrawn.

Conclusion


It is respectfully submitted that the present application is now in a condition for allowance, and it is requested that it now be allowed.

If any fee is due for this amendment, please charge our deposition account 50/1039.

Favorable reconsideration is earnestly solicited.

Respectfully submitted,

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